



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,155	08/24/2001	Jean-Francois Marcerou	Q65084	1786
23373	7590	05/09/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			PASCAL, LESLIE C	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/914,155

Applicant(s)

MARCEROU ET AL.

Examiner

Leslie Pascal

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 3-5, 11, 12 and 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-10, 13, 14 and 18-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2633

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-2 and 6-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. 35 U.S.C. 101 defines four categories of inventions that Congress deemed to be the appropriate subject matter of a patent. The applicant argues that a stream of pulses is a "manufacture". In order to be a "manufacture", it must be manufactured BY something. The applicant has not disclosed "how" or "by what" the stream of pulses is manufactured.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-2, 6-10, 13-14 and 18-23 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure, which is not enabling. Means that provide the signal and method of the claims that are critical or essential to the practice of the invention, but not included in the claim(s) are not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The specification does not teach how the signal is provided. Although it discusses using a prior art means (Walklin), it is unclear how Walklin is modified to provide this signal. Are there specific additional means to the ones in Walklin? Or does the means of Walklin with no physical changes provide the signal as claimed?

5. The amendment filed 4-15-05 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment

shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the drawing of 4-15-05. The applicant never disclosed what device provides the signal. It is new matter to show a MZ modulator, which has no support in the specification, as means providing the specified signal. Further, just showing a box labeled "modulator" or "transmitter" does not provide an enabling disclosure. This does not teach one of ordinary skill in the art how to make and/or use the invention.

Applicant is required to cancel the new matter in the reply to this Office Action.

6. The drawings are objected to under 37 CFR 1.83(b) because they are incomplete. 37 CFR 1.83(b) reads as follows:

When the invention consists of an improvement on an old machine the drawing must when possible exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled

"Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

There are no original drawings in this case. The specification does not teach how the signal is provided. Although it discusses using a prior art means (Walklin), it is unclear how Walklin is modified to provide this signal. Are there specific additional means to the ones in Walklin? Or does the means of Walklin with no physical changes provide the signal as claimed? NO NEW MATTER MAY BE ADDED.

7. In response to the applicant's arguments, the applicant first argues that the claimed invention is a "manufacture". In order to be a manufacture, there must be means to produce the "manufacture". The applicant has not disclosed how the signal is provided. It is not clear how, or by what means this "manufacture" is manufactured. Although a figure was added, it is new matter since the original specification does not teach a MZ modulator can be used to provide the signal. The applicant has not responded to specific questions of the drawings. The applicant argues that one of ordinary skill in the art would know how to modify a known transmitter in order to produce signals as claimed once the idea is provided to them. This is so unclear; the only prior art means taught in the specification is Wilkins, which teaches NRZ pulses with a relative phase difference between two non null intensity states of  $\pi$ . There must be extensive modification of the transmitter of Wilkins to provide the signal of the present claims. The applicant must be in possession of the knowledge of how to make/

Art Unit: 2633

and or use the invention. There is no proof that the applicant can make and/or use the invention as claimed. Further, just showing a box labeled "modulator" or "transmitter" does not provide an enabling disclosure. The applicant must teach how a stream of non-soliton RZ pulses are provided that have the specifics of the claimed subject matter. It is not enough for the applicant to say that anyone of ordinary skill in the art could figure it out. This appears to mean that it is so obvious that anyone of ordinary skill in the art would have thought to do it (which appears to be the basis of the 103 rejection). The applicant argues, "The use of a Mach-Zehnder modulator seems to be unfamiliar to the examiner". This is not the case, what is unfamiliar to the examiner is the use of a Mach-Zehnder modulator to provide a stream of non soliton RZ pulses in which the phase difference between the end of one pulse and the beginning of the next pulse is in the range from  $2\pi/3$  to  $4\pi/3$ . If the applicant knows of a teaching that shows this, the examiner would be happy to refer to it. This argument appears to say that since a Mach Zehnder can be used, it can be used somehow in the applicant's invention. The applicant questions why art was not used. The examiner has no idea how to provide the signal claimed. The specification, and the applicant's arguments have not made it any clearer. The examiner is taking the position that if the applicant is unable to explain how the signal is provided, either he does not know how to make and/or use the invention OR it is so well known that he does not have to explain how to make/or use the invention. If the applicant doesn't know how to make it, then he is not entitled to a patent. If it is so well known that he does not have to explain how to make it, then the applicant is admitting that it is well known.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Pascal whose telephone number is 571-272-3032. The examiner can normally be reached on Monday, Friday 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Leslie Pascal  
Primary Examiner  
Art Unit 2633